## ABSTRACT OF THE DISCLOSURE

A high-pressure fluid is continuously generated with high efficiency without causing pulsation of pressure by reciprocally moving a piston having first, second and third chamber sections under the control of an actuator including an operating pressure source and a directional control valve. With the reciprocating motion of the piston, liquid or fluid such as gas is fed into the first, second and third chamber sections in sequence through check valves and finally discharged outside at high pressure. The actuator is operated hydraulically, mechanically or electrically.